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29 Mar 1995

From: Commanding Officer, Engineering Field Activity West, Naval Facilities Engineering Command
To: Distribution

Subj: DOCUMENT SUMMARY FOR DRAFT WORK PLAN FOR THREATENED AND ENDANGERED SPECIES SURVEY, NAVAL AIR STATION (NAS), ALAMEDA, CALIFORNIA

Encl: (1) Document Summary for Draft Work Plan, Ecological Risk Assessment, Terrestrial Scoping Assessment and Threatened and Endangered Species Survey

1. Enclosure (1) is submitted for your information. The referenced document has been submitted at the same time as this letter for a 45 day review to the regulatory agencies and trustees. The RAB Co-chair and Focus Group Leaders have also been sent a copy of the draft document for their review. This document does not require review or comments from the RAB; however, if you would like a copy of the document, please make your request directly to me, by phone at (415) 244-2555 or FAX (415) 244-2341.

2. If you have any questions regarding this matter, please give me a call.

Original Signed by:

GEORGE KIKUGAWA
By direction

Distribution:
RAB Members:
Ms. Ardella Dailey
Mr. Frank Encino, Jr.
Dr. John Healy
Mr. Richard King
Mr. Bert Morgan
Mr. John Raphael
Mr. Michael Torrey
Mr. Malcolm Mooney
Mr. Ken O'Donoghue
Mr. Kent Rosenblum
Ms. Lyne Stirewalt

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WRITER: G. Kikugawa/09ER3GK/X2559
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ECOLOGICAL RISK ASSESSMENT: TERRESTRIAL SCOPING ASSESSMENT AND THREATENED AND ENDANGERED SPECIES SURVEY WORK PLAN

DOCUMENT SUMMARY

RAB COMMENTS ARE NOT REQUIRED FOR THIS DOCUMENT

Document Type: Work plan

Date: March 1995

Version: Draft

Summary:

This document describes two activities to be performed at Naval Air Station (NAS) Alameda:

- Terrestrial Scoping Assessment
- Threatened and Endangered Species Survey

These activities and their purpose are described below.

Terrestrial Scoping Assessment

A scoping assessment is the first step in the process to evaluate the hazards contaminants may pose to the environment. The terrestrial scoping assessment described in this work plan will (1) characterize plant and animal species and their habitats at NAS Alameda, (2) identify the potential presence of contaminants that may threaten those species, and (3) identify potential exposure pathways (routes through which plants or animals are exposed to a chemical). These three tasks are described in more detail below, but first it is worthwhile to understand how the results of the scoping assessment will be used. If the scoping assessment determines that a plant or animal species may be threatened by contaminants, more detailed study will be recommended. In addition, the results of the scoping assessment will be used to identify potential assessment and measurement endpoints. An assessment endpoint is an ecological value one wishes to protect. For example, the reproductive capabilities of an endangered species or the functioning of a wetlands area may be agreed on as an assessment endpoint. Because assessment endpoints can't be measured directly, measurement endpoints are selected. A measurement endpoint is a measurable environmental characteristic that is related to the assessment endpoint. For example, if the assessment endpoint is a viable habitat for a fish-eating bird species, the measurement endpoint selected may be to study the availability and quality of the bird's main food

source -- fish. In order to effectively select assessment and measurement endpoints, one must understand the environment being studied, specifically the habitat, the contaminants, and the ways the contaminants may or may not reach animals and plants that use the habitat. Understanding the environment in this way is the goal of the scoping assessment.

The scoping assessment described in this work plan will focus on the terrestrial (pertaining to land) ecosystem at NAS Alameda; the aquatic (water) ecosystem is being addressed in the ecological assessment of OU 4. The specific areas addressed by the terrestrial scoping assessment are OUs 1, 2, 3, and the land area of OU 4 (see Figure S-1). The three tasks to be conducted as part of the terrestrial scoping assessment are described below.

Characterize Plant and Animal Species and their Habitat. Experienced field biologists will conduct field surveys at OUs 1, 2, 3, and the land area of OU 4. The field survey is tentatively planned for late May or early June 1995. Based on its field observations, the survey team will describe terrestrial habitat and the amount of land it covers and identify plant and animal species at NAS Alameda, including waterfowl that feed near NAS Alameda in San Francisco Bay. Before the field surveys begin, the survey contractor will review existing literature and aerial photographs to better focus the survey. Existing literature to be reviewed will include a list of habitats protected by the State of California. The appendices of the work plan include preliminary lists of plant and animal species thus far identified as likely to be present at NAS Alameda. Completion of the literature search will add to these lists.

Identify Potential Contaminants of Concern. Site histories and laboratory sampling results from previous investigations will be used to identify potential contaminants of concern. Potential contaminants of concern are chemicals that are determined to exist at a site at levels that are either above prescribed regulatory levels or above acceptable risk levels. As a result of this task, a list of potential contaminants of concern will be compiled and the contaminated media (soil, water, air) and the potentially affected habitats will be described.

Identify Potentially Complete Exposure Pathways. Potentially complete exposure pathways are known routes of chemical exposure, such as skin contact with contaminated soil or eating contaminated food. An exposure pathway is considered complete if it has a contaminated media (such as soil), a "receptor" (such as a plant), and a method for the receptor to be exposed to the contaminated media (such as the plant drawing nutrients from the soil). An example of an incomplete pathway would be contaminants located deep beneath soil that is covered by asphalt; because of the depth of contaminants and the asphalt cover, neither plants nor animals have any means of contacting the contaminants.

During the field survey, the survey team will identify potentially complete exposure pathways within OUs 1, 2, 3, and the land areas of OU 4.

The scoping assessment work plan was prepared using guidance documents distributed by the California Environmental Protection Agency, the Department of Toxic Substances Control, and the U.S. Environmental Protection Agency. The work plan also reflects discussions among the Navy and state and federal agencies.

Threatened and Endangered Species Survey

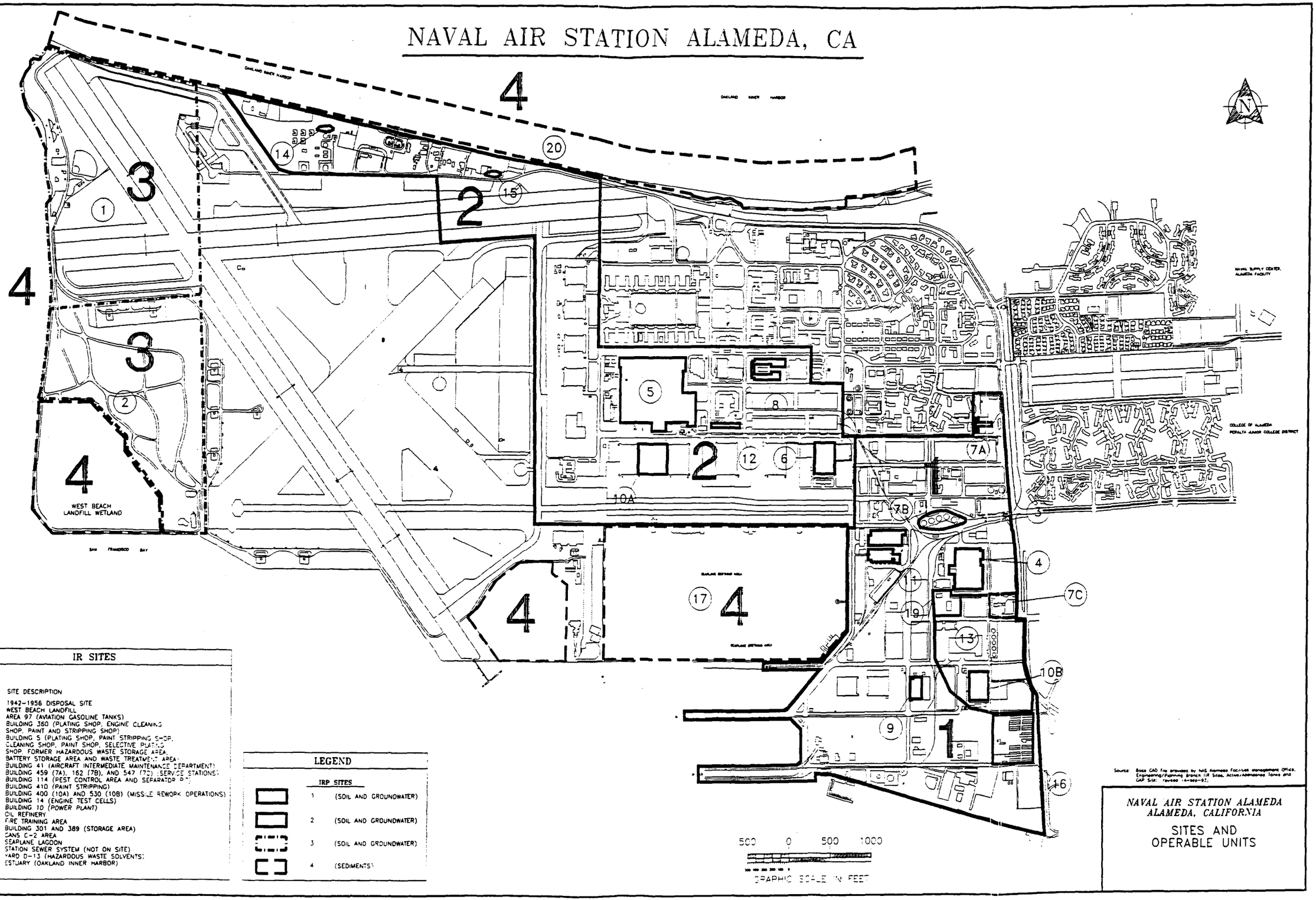
In order to gain a better understanding of the environment at NAS Alameda, a survey is proposed to identify the threatened and endangered plant and animal species (such as the least tern) that use NAS Alameda habitat. The survey will consist of three components, as described below.

Literature Review. Published literature will be reviewed, and academic, non-profit, and government organizations will be contacted about protected species known to use NAS Alameda. The appendices of the work plan contain lists of plant and animal species thus far identified as likely to be present at NAS Alameda. The literature search will add to these lists.

Vegetation Survey. Following the literature review, a field biologist will conduct a field survey, using a visual search method, for specific threatened and endangered plant species that may occur at NAS Alameda. The U.S. Fish and Wildlife Service agrees with this approach. The survey is proposed to occur in late May or early June 1995, which appears to be the flowering period common to plant species expected to occur near the wetlands area.

Salt Marsh Harvest Mouse Survey. A survey will also be conducted to determine the absence or presence of the federally threatened salt marsh harvest mouse at the west beach landfill wetland and the runway wetland. This threatened species is being surveyed because it is thought to be present at NAS Alameda. (During field surveys, survey teams always look for indicators of species of special concern; the salt marsh harvest mouse has been isolated for survey because there are indicators this species is likely to be present at NAS Alameda.) The field survey is tentatively planned for late summer or early fall 1995. The survey design is being developed in consultation with the U.S. Fish and Wildlife Service.

NAVAL AIR STATION ALAMEDA, CA



IR SITES

SITE #	SITE DESCRIPTION
1.	1942-1956 DISPOSAL SITE
2.	WEST BEACH LANDFILL
3.	AREA 97 (AVIATION GASOLINE TANKS)
4	BUILDING 360 (PLATING SHOP, ENGINE CLEANING SHOP, PAINT AND STRIPPING SHOP)
5.	BUILDING 5 (PLATING SHOP, PAINT STRIPPING SHOP, CLEANING SHOP, PAINT SHOP, SELECTIVE PLATING SHOP, FORMER HAZARDOUS WASTE STORAGE AREA, BATTERY STORAGE AREA AND WASTE TREATMENT AREA)
6.	BUILDING 41 (AIRCRAFT INTERMEDIATE MAINTENANCE DEPARTMENT)
7.	BUILDING 459 (7A), 162 (7B), AND 547 (7C) (SERVICE STATIONS)
8.	BUILDING 114 (PEST CONTROL AREA AND SEPARATOR PIT)
9	BUILDING 410 (PAINT STRIPPING)
10.	BUILDING 400 (10A) AND 530 (10B) (MISSILE REWORK OPERATIONS)
11	BUILDING 14 (ENGINE TEST CELLS)
12.	BUILDING 10 (POWER PLANT)
13.	OIL REFINERY
14	FIRE TRAINING AREA
15.	BUILDING 301 AND 389 (STORAGE AREA)
16.	CANS C-2 AREA
17	SEAPLANE LAGOON
18	STATION SEWER SYSTEM (NOT ON SITE)
19	YARD D-13 (HAZARDOUS WASTE SOLVENTS)
20.	ESTUARY (OAKLAND INNER HARBOR)

LEGEND

IRP SITES

1 (SOIL AND GROUNDWATER)

2 (SOIL AND GROUNDWATER)

3 (SOIL AND GROUNDWATER)

4 (SEDIMENT)

Source: Base CAD file provided by NAS Alameda Facilities Management Office, Engineering/Planning Branch (IR Sites, Active/Abandoned Tanks and CAP Site: revised 14-sep-93)

NAVAL AIR STATION ALAMEDA
ALAMEDA, CALIFORNIA

SITES AND
OPERABLE UNITS

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